

NOTES

NEW COMBINATIONS IN *EPILOBIUM* (ONAGRACEAE)

In the course of preparation of a revision of the North American species of *Epilobium*, we have found the new combinations proposed in this paper to be desirable. They will be fully discussed and justified in our subsequent publications, but are offered at this time, with minimal synonymy, in order to make the names available.

Epilobium ciliatum Raf., Med. Repos. II. 5: 361. 1808.

Epilobium ciliatum subsp. ***ciliatum***.

E. adenocaulon Hausskn., Oesterr. Bot. Z. 29: 119. 1879.

E. leptocarpum Hausskn. var. *macounii* Trel., Annual Rep. Missouri Bot. Gard. 2: 103. 1891.

E. brachycarpum sensu Munz, Aliso 4: 489. 1960; N. Amer. Fl., ser. 2, 5: 218. 1965, non Presl 1831.

Epilobium ciliatum subsp. ***glandulosum*** (Lehm.) Hoch & Raven, comb. nov.

Based on *E. glandulosum* Lehm., Stirp. Pug. 2: 14. 1830.

E. boreale Hausskn., Monogr. Epil. 279. 1884.

E. exaltatum sensu auct. mult.; non Drew, Bull. Torrey Bot. Club 16: 151. 1889.

Epilobium ciliatum subsp. ***watsonii*** (Barbey) Hoch & Raven, comb. nov.

Based on *E. watsonii* Barbey, in Brew. & S. Wats., Bot. Calif. 1: 219. 1876.

Epilobium hornemannii Reichenb., Icon. Crit. 2: 73, fig. 313. 1824.

Epilobium hornemannii subsp. ***hornemannii***.

Epilobium hornemannii subsp. ***behringianum*** (Hausskn.) Hoch & Raven, comb. nov. Based on *E. behringianum* Hausskn., Monogr. Epil. 277. 1884.

Support from the U. S. National Science Foundation to Peter Raven is gratefully acknowledged.

—Peter C. Hoch and Peter H. Raven, Missouri Botanical Garden, 2345 Tower Grove Avenue, St. Louis, Missouri 63110.

CHROMOSOME NUMBER IN *PILLANSIA* (IRIDACEAE)

The chromosome number in the South African monotypic genus *Pillansia* was previously reported (Goldblatt, 1971) as $2n = 44$. New material obtained subsequently proved without doubt to be $2n = 40$ (Fig. 1). The earlier record was obtained from paraffin sections of root tips and from anther squashes where 22 bivalents were noted. Plants in the earlier study were all from Rooi Els, Bettys Bay, Cape Prov., South Africa, [Goldblatt 471 (BOL)], and those used in the present work were from Arieskraal, Cape Prov., South Africa, [Powrie s.n.

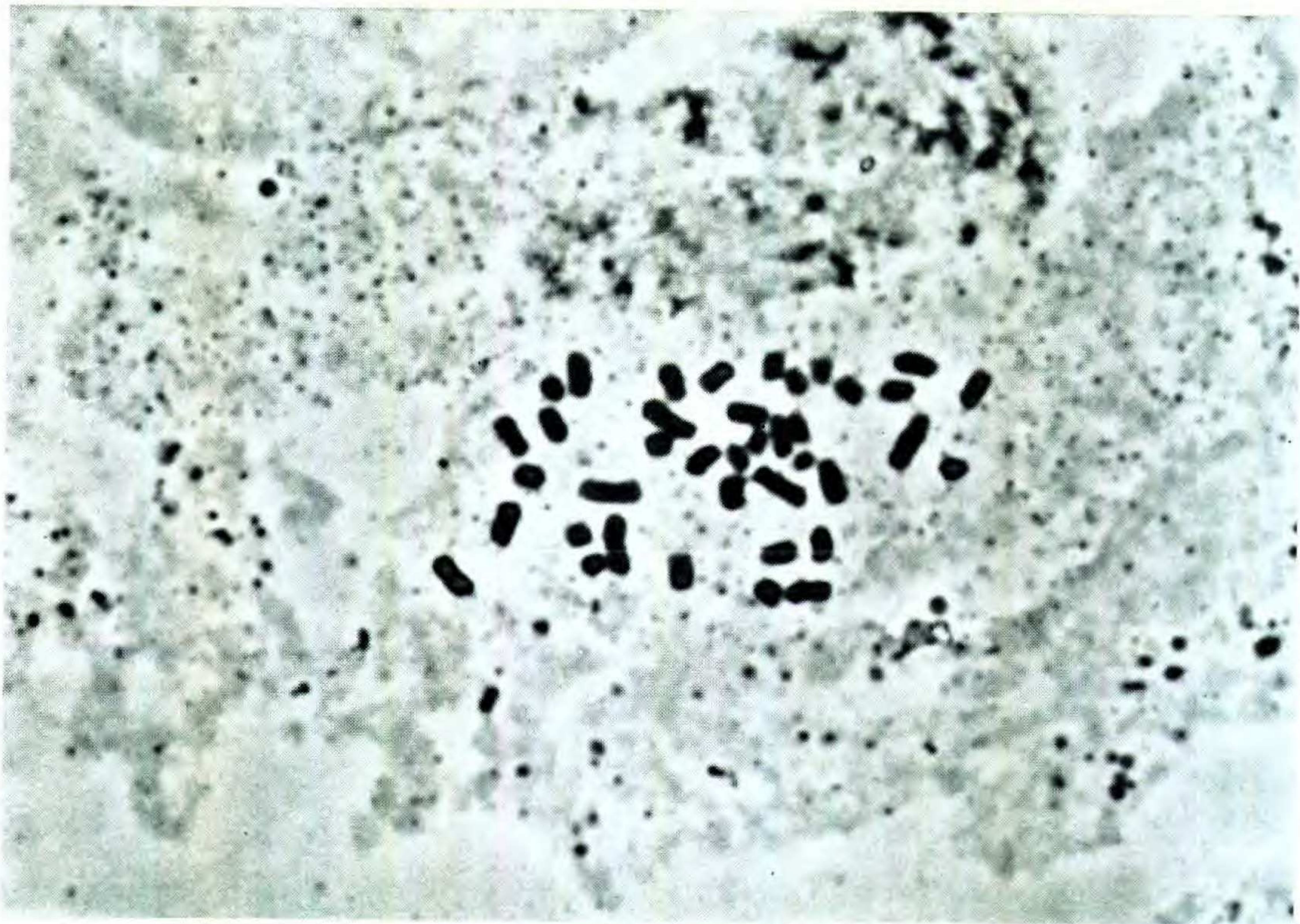


FIGURE 1. Metaphase chromosomes of *Pillansia templemanii* stained with lacto-propionic orcein; $\times 1,200$.

(MO)] some distance away. A squash technique was used with the new material, and root tips were treated as described elsewhere (Goldblatt, 1976).

Pillansia is a monotypic genus of Iridaceae belonging to the exclusively Old World and predominantly African subfamily Ixioideae. The only species *P. templemanii* (Baker) L.Bolus is rare and occurs in a very localized area of the southwestern Cape Province of South Africa. Although it is undoubtedly a member of the Ixioideae, it is peculiar in this subfamily in several respects and hence of particular interest. Most remarkable is its paniculate inflorescence, quite unlike the spike, typical of the subfamily. The branched panicle is believed to be an ancestral condition from which the spike was derived, which suggests that *Pillansia* is a primitive Ixioid. A second peculiarity of *Pillansia* is that the corms are persistent, lasting several seasons instead of being annual as is usual in the Ixioideae. Lewis (1954) suggested that this condition in *Pillansia* was possibly transitional in the evolution of the corm from a rhizome. Thus *Pillansia*, primitive in both its inflorescence and rootstock, is probably a significant evolutionary link between the Ixioideae and less specialized subfamilies of Iridaceae, or their ancestors.

The chromosome number of $2n = 20$ reported here confirms the polyploid condition in the genus. The closest allies of *Pillansia*—*Watsonia*, *Thereianthus*, and *Micranthus* which together comprise subtribe Watsoniinae (Goldblatt 1971)—are in contrast basically diploid, with $x = 10$ in *Thereianthus* and *Micranthus* and $x = 9$ in *Watsonia*. As it is unlikely that *Pillansia* is heteroploid, the earlier report of $n = 22$ appears erroneous. Unfortunately, no more material is available at present to investigate the situation more fully.

LITERATURE CITED

- GOLDBLATT, P. 1971. Cytological and morphological studies in the southern African Iridaceae. *J. S. African Bot.* 37: 317–460.
———. 1976. Chromosome number and its significance in *Batis maritima* (Bataceae). *J. Arnold Arbor.* 57: 526–530.
LEWIS, G. J. 1954. Some aspects of the morphology, phylogeny and taxonomy of the South African Iridaceae. *Ann. S. African Mus.* 40: 15–113.

—Peter Goldblatt, B. A. Krukoff Curator of African Botany, Missouri Botanical Garden, 2345 Tower Grove Avenue, St. Louis, Missouri 63110.

A NEW *JACARANDA* (BIGNONIACEAE) FROM ECUADOR AND PERU

Jacaranda sparrei A. Gentry, sp. nov.

Arbor. Folia pinnatim bicomposita, plerumque 13-pinnata, pinnis 13–21-foliolatis, foliolis 1–2 cm longis, 0.5–1 cm latis, apiculatis. Flor calyce fere patelliformi, 5-dentato, corolla tubulo-campanulata supra basim angustatam arcuatam, extus puberula, staminodio exserto, antheris 1-theclatis, ovario puberulo. Fructus ignotus.

Tree; branchlets subtetragonal, very minutely puberulous, with whitish lenticels. Leaves pinnately bicomposite, usually with 13 pinnae, each pinna with a slightly winged rachis and 13–21 sessile, asymmetrically oblong leaflets, these 1–2 cm long and 0.5–1 cm wide, apiculate, glabrescent above, barbate at least along the base of midvein below. Inflorescence an open terminal panicle, puberulous. Flowers with the calyx almost patelliform, shallowly 5-dentate, ca. 2 mm long and 5 mm wide, puberulous; corolla purplish blue, tubular-campanulate above a narrow neck which is conspicuously curved and enlarged toward the base, 2.5–3 cm long, 1.1–1.3 cm wide at the mouth, the lobes small, less than 5 mm long, the whole tube puberulous outside, glabrous inside except at the stamen insertion; stamens didynamous, the anthers 1-theclate, the second theca reduced to a minute appendage, each theca 3–4 mm long, the staminode 2.5–3 cm long, subexserted, the middle third and apex glandular pubescent; ovary flattened-ovate, 2 mm long, 2 mm wide, densely puberulous. Fruit not seen.

TYPE: ECUADOR. LOJA: Between Panamerican Highway and Zumbi on road to Machala, km. 69, dry quebrada vegetation, 2100 m, 23 Sep. 1967, *Sparre 18862* (MO, holotype).

Additional collection examined: PERU. PIURA: Ayabaca, Oct. 1868, *Raymondi 1252* (USM).

This species is exactly intermediate between *J. acutifolia* H. & B. and *J. mimosifolia* D. Don on the one hand and the *J. caucana* complex on the other. It has the relatively large leaflets and pubescent ovary of *J. caucana* Pittier but the pubescent corolla tube of *J. mimosifolia*. The curvature and enlarged base of the corolla are more pronounced than in *J. acutifolia* but less so than in *J. caucana*. Neither of these species has such reduced corolla lobes nor notably exserted staminodes as